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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

GERALD MORRISON, ET AL.

Patent No.: 6,919,880

Issue Date: July 19, 2005

Application No.: 09/870,698

Filed: June 1, 2001

For: **CALCULATING CAMERA OFFSETS
TO FACILITATE OBJECT POSITION
DETERMINATION USING
TRIANGULATION**

Examiner: Kimnhung T. Nguyen

Group Art Unit: 2674

Confirmation No.: 1792

November 29, 2005

Certificate of Corrections
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Certificate
DEC 02 2005
of Correction

CERTIFICATE OF CORRECTION
UNDER RULE 323

Sir:

It is respectfully requested that a Certificate of Correction be issued by the Patent and Trademark Office due to mistakes of a clerical, typographical, or minor character. While most of the errors were the fault of the Office, at least one was not. Therefore, this request is being made under Rule 323.

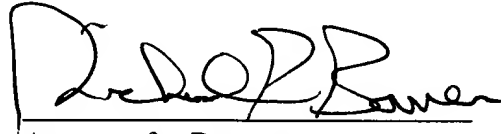
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Please charge the \$100.00 statutory fee for this Certificate of Correction to Deposit Account No. 50-1710. Also, the Commissioner is authorized to charge any additional fees deemed appropriate and make any refunds to the same Deposit Account. A duplicate copy of the proposed Certificate of Correction is enclosed.

Patentees' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard P. Bauer", written over a horizontal line.

Attorney for Patentees
Richard P. Bauer
Registration No. 31,588

PATENT ADMINISTRATOR
KATTEN MUCHIN ROSENMAN LLP
525 West Monroe Street
Chicago, Illinois 60661-3693
Facsimile: (312) 902-1061

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO: 6,919,880
ISSUED: July 19, 2005
INVENTOR(S): Gerald Morrison and David Holmgren

It is certified that errors appear in the above-mentioned patent and that said Letters Patent is hereby corrected as shown below:

On the Cover Page, in the Title, “ (54) CALIBRATING CAMERA OFFSETS TO FACILITATE OBJECT POSITION DETERMINATION USING TRIANGULATION” should read -- (54) CALCULATING CAMERA OFFSETS TO FACILITATE OBJECT POSITION DETERMINATION USING TRIANGULATION--.

On the Cover Page, “(73) Assignee: Smart Technologies Inc. (CA)” should read --SMART Technologies Inc (CA).--.

On the Cover Page, in the abstract, line 9, “at least two cameras at least one location” should read --at least two cameras at at least one location--.

Column 4, line 12, “determine the position of the object” should read --determining the position of the object--.

Column 5, line 24, “the touch is system” should read --the touch system--.

Column 5, line 52, “based on CMOS digital care” should read --based on CMOS digital camera--.

Column 6, line 22, Equation (0.1), “ $2(x/a)\tan$ ” portion of equation needs to be part of the numerator.

Column 6, line 58, “edge of the touch surface” should read --edges of the touch surface--.

Column 8, line 5, Equation (0.16), “ x_{cam} ” portion of equation needs to be part of the numerator.

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Column 8, line 5, Equation (0.16) – “ x_{cam} ” portion of equation needs to be part of the numerator.

Column 8, line 65, “ $A\bar{x} = \bar{b}$ ” should read -- $A\vec{x} = \vec{b}$ --.

Column 9, line 2, “ $\bar{x} = A^{-1}\bar{b}$ ” should read -- $\vec{x} = A^{-1}\vec{b}$ --.

Column 9, line 20, Equation (0.20), “ $A^T A\bar{x} = A^T \bar{b}$ ” should read -- $A^T A\vec{x} = A^T \vec{b}$ --.

Column 9, line 22, Equation (0.20), “ $\bar{x} = (A^T A)^{-1} A^T \bar{b}$ ” should read -- $\vec{x} = (A^T A)^{-1} A^T \vec{b}$ --.

Column 9, line 26, Equation (0.21), “ $\bar{x} = A^T (AA^T)^{-1} \bar{b}$ ” should read -- $\vec{x} = A^T (AA^T)^{-1} \vec{b}$ --.

Column 9, line 37, “when translation” should read --when triangulation--.

Column 10, line 52, “correction vector \bar{x} ” should read --correction vector \vec{x} --.

Column 10, line 54, Equation (1.5), “ $\bar{x} = A^T (AA^T + I/V)^{-1} \bar{b}$ ” should read --
 $\vec{x} = A^T (AA^T + I/V)^{-1} \vec{b}$ --.

Column 11, line 20, Equation (2.0), numerator “ $y_i - y_c^i$ ” should read -- $y_i - y_c^i$ --.

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Column 14, line 62, "multiple triangular" should read --multiple triangulation--.

Column 14, lines 64-65, "device to determine offset angles of said imaging devices prior to" should read --device to determine offset angles of said imaging device prior to--.

Column 15, lines 25-26, "by determining offset angles of said imaging devices to compensate for fields of view of said imaging devices" should read --by determining offset angles of said imaging devices to compensate for fields of view of imaging devices--.

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In the Drawings, Figure 2, "62a" should read -60a--.

In the Drawings, Figure 2, "62b" should read -60b--.

U.S. Patent

Jul. 19, 2005

Sheet 2 of 3

US 6,919,880 B2

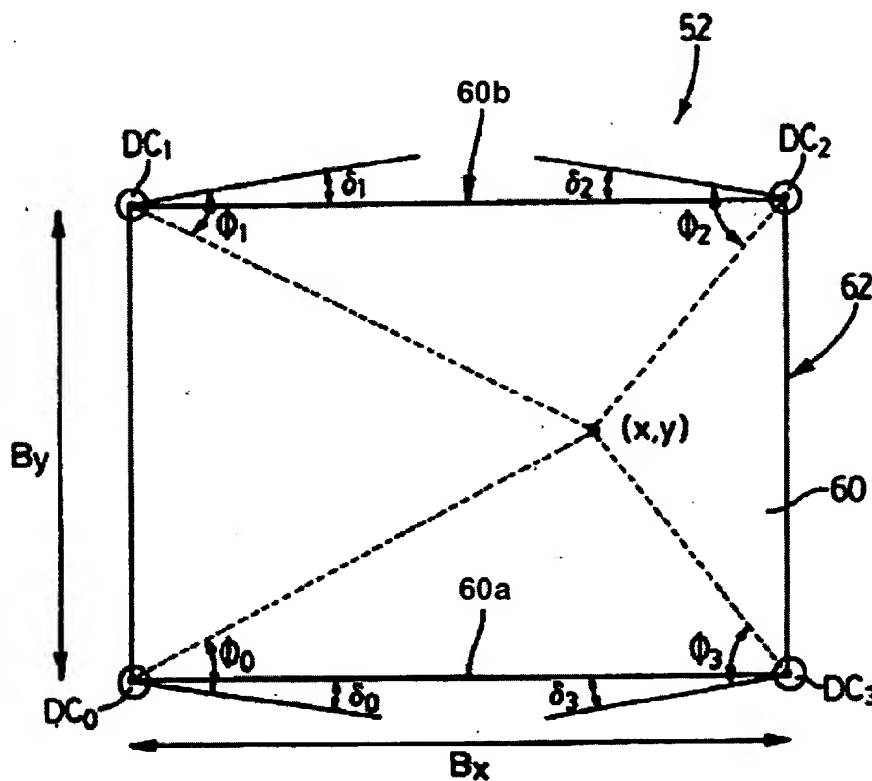


FIG. 2

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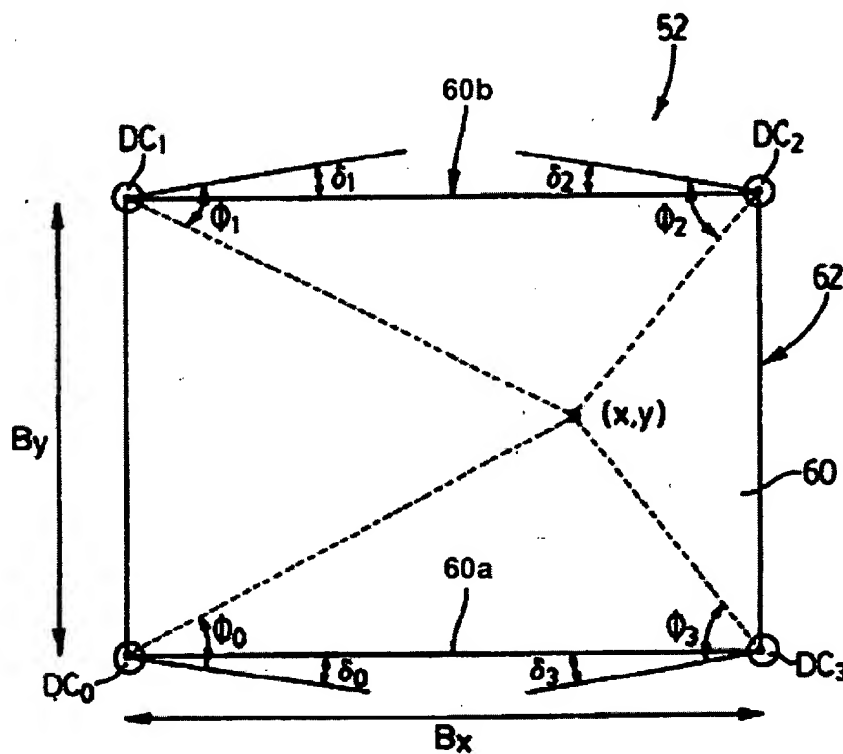
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On the Cover Page, in the Representative Drawing, "62 a" should read --60a--.
On the Cover Page, in the Representative Drawing, "62 b" should read --60b--.



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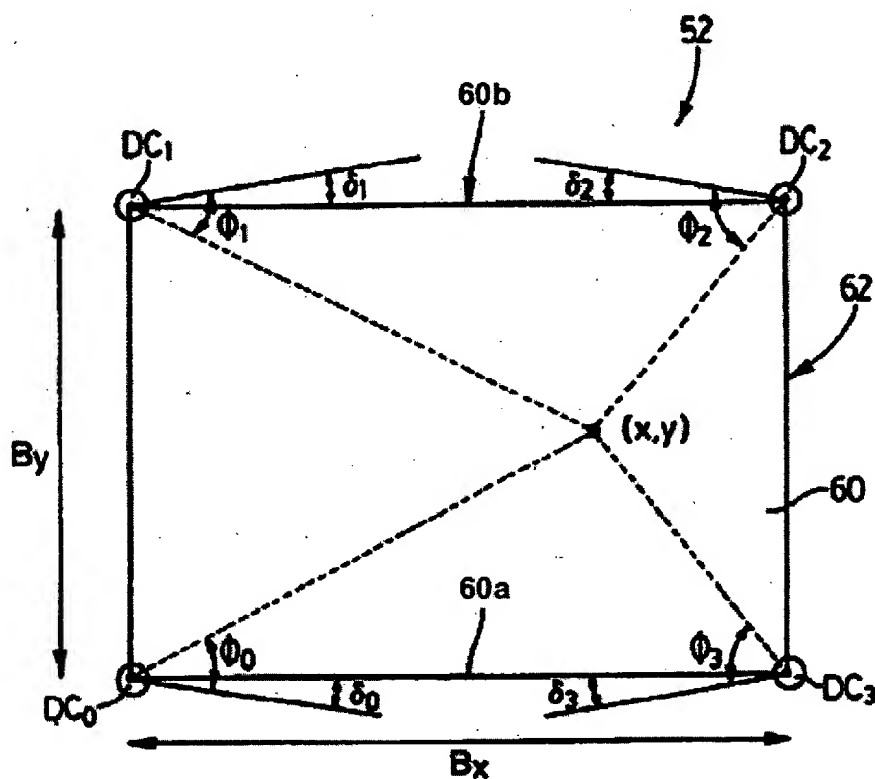


FIG. 2

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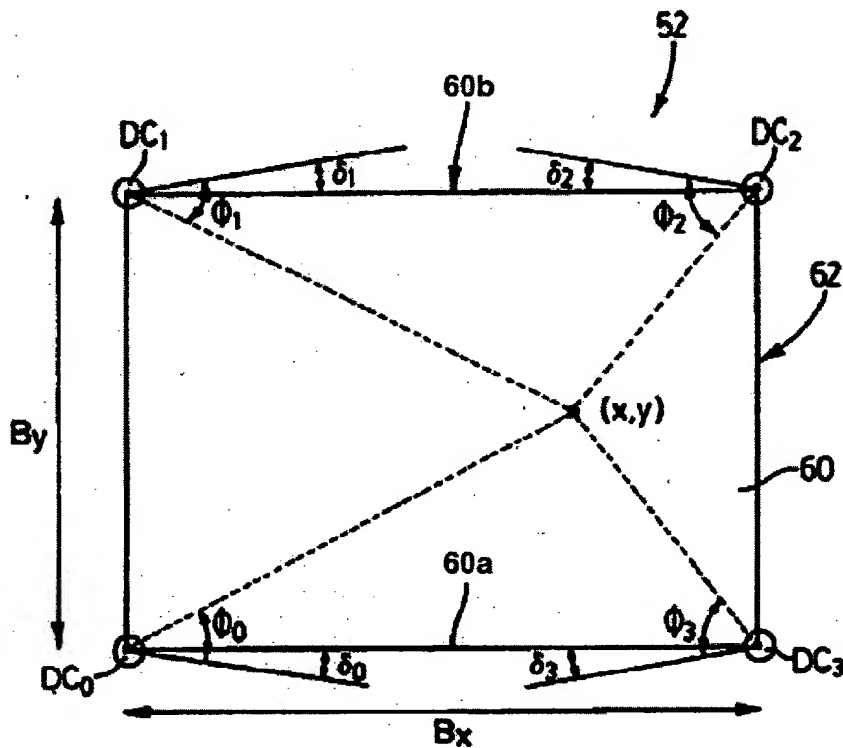
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